

WHAT IS CLAIMED IS:

1. A method for sanitizing, comprising
  - (A) preparing an aqueous solution of ozone by
    - (A.1) manufacturing a gaseous stream of ozone from oxygen having a purity of at least 90 vol.%,
    - (A.2) providing a stream of water having a pH of 6.5 - 7.5 from a source which monitors the pH of said water and adjusts the pH as necessary to maintain the pH in said range, and
    - (A.3) injecting said gaseous stream of ozone directly into said stream of water;
  - (B) feeding said aqueous solution of ozone into a tank which holds said solution and which has over said solution a gaseous atmosphere comprising ozone;
  - (C) applying said aqueous solution of ozone from said tank onto a surface to be sanitized; and
  - (D) recovering water from said surface and recycling it to said source.
2. A method according to claim 1 wherein said source of water is a storage vessel.
3. A method according to claim 2 wherein said storage vessel comprises means for sensing the pH of the water in the vessel and means for adjusting the pH of said water by adding acidic or alkaline material to the water in response to the sensed pH being above 7.5 or below 6.5.
4. A method according to claim 1 wherein the solution manufactured by said step of injecting said

gaseous stream of ozone directly into said stream of water comprises 1% to 15% (w/w) ozone.

5. A method according to claim 1 wherein said tank which holds said ozone solution comprises a vent for venting gas from the gaseous atmosphere over said solution.

6. A method according to claim 5 wherein said vent further comprises an ozone destroyer.

7. A method according to claim 1 wherein the ozone concentration in the solution in said tank is 1 to 10 ppm.